

Work Order ID 97235]

97235

Page 1

February-14-13 1:14:59 PM

Item ID: D2022-101

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Spacer

Start Date: 2/14/13 Start Qty: 50.00

50

Cust Item ID:

Required Date: 2/22/13 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan: *MLS*

Date: *13-02-15* Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr

Revision Nbr

D2022

rev 97.01.14

100

0.00

100

Hardinge

Memo

0.00

Hardinge CNC Lathe Small

Note: .257" dia drill

1-Turn as per folio FA206 & dwg

FOLIO REV: *AA*

DWG REV: *N/A*

2-Deburr as required

110

QC2- Inspect parts off machine FAI/FAIB

0.00

110

QC

Memo

0.00

Quality Control

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
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Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
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Equip/Tooling <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Material <input type="checkbox"/>									
Setup <input type="checkbox"/>									
Other <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions
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Work Order ID 97235

February-14-13 1:14:59 PM

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Page 2

Item ID: D2022-101

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Spacer

Stop

NS2

Start Date: 2/14/13 Start Qty: 50.00

50

Cust Item ID:

Required Date: 2/22/13 Req'd Qty: 50.00

50

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

120

QC8- Inspect parts - second check

0.00

24 13-2-20

50

9

120

QC

Memo

0.00

Quality Control

130

Identify as per dwg & Stock Location: ST004 0.00

130

Packaging

Memo

0.00

Packaging

50

50

13-2-20

140

QC21- Final Inspection - Work Order Release 0.00

140

QC

Memo

0.00

Quality Control

13/2/21

13-02-20

NCR: Yes / No

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Picklist Print

February-14-13 10:54:21 AM

Page 1

Work Order ID: 97235

Parent Item: D2022-101

Parent Item Name: Spacer

Start Date: 2/14/13

Required Date: 2/22/13

Start Qty: 50.00

Required Qty: 50.00

Comments: IPP D02.03.07 Now made in house NG

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
V6061T6R0.750 6061-T6 Round Bar .750"		Purchased	No			100	f	51.5180	0.03	1.701' 1.5		13-02-20	

Location

Loc Qty

Loc Code

MAT012

13

120734

13

MAT013

38.518

121282

9.024

122081

26.494

123757

3

1.701'

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

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Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

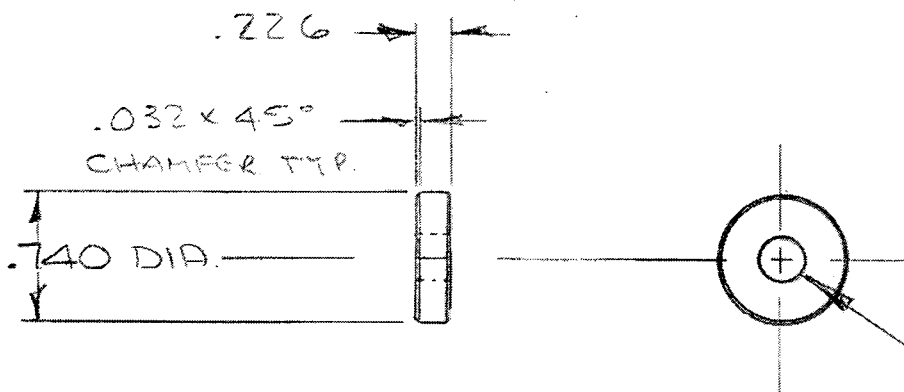
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RELEASED
970119 BW

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AGREEMENT
WITHOUT NOTICE
WORK ORDER

NO. 97235ML5

13-02-15



DRILL 'F' (.257) DIA. IN -101
DRILL P (.323) DIA IN -103

D2022-101
D2022-103

MAT'L: ALUMINUM 6061-T6 (QQ-A-225/B)



D2022

D2022-103		SPACER 5/16 ALUM 6061-T6		QQ-A-250/B	
D2022-101		SPACER 1/4 ALUM 6061-T6		QQ-A-250/B	

REVISION	THIS DRAWING IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT THE PERMISSION OF DART AERO.	RIVET CODE SHALL BE PER NAS 523	QTY. REQUIRED	PART NO.	ITEM	DESCRIPTION	MATERIAL	SPEC./VENDOR																																			
DRAWN	REQUIREMENTS — UNLESS OTHERWISE SPECIFIED <table border="1"> <tr> <th>GENERAL</th> <th>LIMITS</th> </tr> <tr> <td>1. DIMENSIONS ARE IN INCHES</td> <td>1. TOLERANCES — XX ± .030</td> </tr> <tr> <td>2. SURFACE ROUGHNESS 75</td> <td>2. ANGLES JOX & Q10</td> </tr> <tr> <td>3. REMOVE SHARP EDGES .015 MAX</td> <td>3. PARALLELISM .1</td> </tr> <tr> <td>4. THREADS PER INCH — 5 — 3742</td> <td>4. ECCENTRICITY .005 MAX.</td> </tr> <tr> <td>5. HOLES PER AND 10381</td> <td>5. SYMMETRY ABOUT ALL MFC CENTRE LINES .005</td> </tr> </table>	GENERAL	LIMITS	1. DIMENSIONS ARE IN INCHES	1. TOLERANCES — XX ± .030	2. SURFACE ROUGHNESS 75	2. ANGLES JOX & Q10	3. REMOVE SHARP EDGES .015 MAX	3. PARALLELISM .1	4. THREADS PER INCH — 5 — 3742	4. ECCENTRICITY .005 MAX.	5. HOLES PER AND 10381	5. SYMMETRY ABOUT ALL MFC CENTRE LINES .005	<table border="1"> <tr> <td>BASIC CODE</td> <td>DIA. DASH NO. IN-HEAD REAR SIDE P-HEAD FAR SIDE</td> </tr> <tr> <td>D-DIMPLE</td> <td>LENGTH DASH NO. W-SPOTWELD</td> </tr> <tr> <td>C-COUNTERSINK</td> <td></td> </tr> </table>	BASIC CODE	DIA. DASH NO. IN-HEAD REAR SIDE P-HEAD FAR SIDE	D-DIMPLE	LENGTH DASH NO. W-SPOTWELD	C-COUNTERSINK		APPROVAL <table border="1"> <tr> <td>CONTRACT NO.</td> <td colspan="2">DART AERO ACCESSORIES INC</td> </tr> <tr> <td>DRAWN BRADLEY</td> <td>DATE 9/20/15</td> <td>CLIENT</td> </tr> <tr> <td>DESIGN BRADLEY</td> <td colspan="2">TITLE SPACERS</td> </tr> <tr> <td>STRESS</td> <td>CODE</td> <td>REV.</td> </tr> <tr> <td>CHECKED</td> <td colspan="2">DWG. NO. D2022</td> </tr> <tr> <td>CLIENT</td> <td>SCALE 1:1</td> <td>SHT 1 OF 1</td> </tr> </table>					CONTRACT NO.	DART AERO ACCESSORIES INC		DRAWN BRADLEY	DATE 9/20/15	CLIENT	DESIGN BRADLEY	TITLE SPACERS		STRESS	CODE	REV.	CHECKED	DWG. NO. D2022		CLIENT	SCALE 1:1	SHT 1 OF 1
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REPORT ALL DISCREPANCIES — DO NOT SCALE